Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1.   (CURRENTLY AMENDED) A method of simultaneously transmitting data packets to multiple users using limited transmission power comprising the steps of:

   a)   establishing transmission power requirements for each user <u>including determining a signal to noise ratio in the transmission link to each user whereby requisite power is determined for a desired level of data reception,</u>

   b)   receiving in a queue a plurality of data packets for transmission to one or more users,

   c)   selecting ~~one or more~~ data packets for transmission in a composite burst with cumulative power for the selected packets not exceeding [[the]] <u>said</u> limited transmission power,

   d)   transmitting the selected data packets in [[a]] <u>said</u> composite burst within the limited transmission power, and

   e)   repeating step c) until all data packets in the queue have been transmitted.

2.   (CANCELLED).

3.   (CURRENTLY AMENDED) The method as defined in ~~claim 2~~ <u>claim 1</u> wherein step c) includes identifying data packets which have been delayed in transmission, and giving priority in selection to delayed data packets.

4.   (CURRENTLY AMENDED) The method as defined in claim 3 wherein step c) further includes assigning a priority weight to [[users]] <u>a user</u> based on quality of service subscribed by [[the]] <u>said</u> user.

5.   (ORIGINAL)   The method as defined in claim 4 wherein step c) further includes assigning a priority weight based on explicit prioritization of packets.

6.   (ORIGINAL)   The method as defined in claim 4 wherein each packet is directly spread by a separate orthogonal code sequence for simultaneous multiple access transmission.

7.   (ORIGINAL)   The method as defined by claim 4 wherein each packet is assigned to a different carrier frequency for simultaneous multiple access transmission.

8.   (CANCELLED).

9.   (CANCELLED).

10.   (CURRENTLY AMENDED) The method as defined in claim 1 wherein step c) further includes assigning a priority weight to [[users]] a user based on quality of service subscribed by [[the]] said user.

Claims 11 - 15 (CANCELLED).

16.   (CURRENTLY AMENDED) Apparatus for selecting data packets for simultaneous transmission to multiple users using a limited transmission power comprising:
    a)   a memory for receiving in a queue a plurality of data packets for transmission to one or more users,
    b)   power determining means for establishing power requirements for transmitting data to each user based on signal to noise ratio in each link to each user, and
    c)   data packet selection means for selecting ~~one or more~~ data packets for transmission in a composite burst with cumulative

power for the selected packets not exceeding the limited transmission power, the selecting means delaying packets as necessary to accommodate the limited transmission power.

1 (ORIGINAL) 17.   Apparatus as defined by claim 16 wherein the selection means gives
2 priority in selection to delayed data packets.

1 (ORIGINAL) 18.   Apparatus as defined by claim 16 wherein the selection means gives
2 priority in selection to users based on quality of service.

1 (ORIGINAL) 19.   Apparatus as defined by claim 16 wherein the selection means gives
2 priority in selection to preassigned explicit priority of packets.

1 (ORIGINAL) 20.   Apparatus as defined by claim 16 wherein the selection means gives
.2 priority in selection to delayed data packets, quality of service subscribed by each user, and
3 explicit priority of packets.

21 - 24.   CANCELLED.

25. (CURRENTLY AMENDED) A method of <u>power pooling in network downstream data transmission and</u> simultaneously transmitting data packets to multiple users using limited transmission power comprising the steps of:

5   a) establishing transmission power requirements for each user, <u>including determining a signal to noise ratio in the transmission link to each user whereby transmission power requirement for the data packets is determined,</u>

b) receiving in a queue a plurality of data packets for
10   transmission to one or more users, creating a transmission burst for each data packet, and power-scaling the bursts based on the respective transmission power requirement,

c) grouping one or more power scaled bursts in a composite burst using a prioritization scheme so that the cumulative power
15   for the composite burst does not exceed the limited transmission power,

d) transmitting the selected data packets in a composite burst within the limited transmission power, and

e) repeating steps c) and d) until all data packets in the
20   queue have been transmitted.

26. (CANCELLED).

27. (PREVIOUSLY PRESENTED) The method as defined by claim 25 wherein step c) includes identifying transmission bursts which have been delayed in transmission, and prioritizing the transmission bursts based on the delay.

28. (PREVIOUSLY PRESENTED) The method as defined by claim 25 wherein step c) includes assigning a priority weight to each transmission burst based on quality of service subscribed by the user of the respective data packet.

29. (PREVIOUSLY PRESENTED) The method as defined by claim 25 wherein step c) further includes assigning a priority weight to each transmission burst based on a priority assigned to the respective data packet.

30. (PREVIOUSLY PRESENTED) The method as defined by claim 25 wherein each transmission burst is obtained by directly spreading the respective data packet using a separate orthogonal code sequence.

31. (CANCELLED).

32. (PREVIOUSLY PRESENTED) The method as defined by claim 25 wherein step c) includes identifying the number of delays for each data packet which has been delayed in transmission, and assigning a highest priority to the transmission bursts with the highest number of delays.

33. (CANCELLED).

34. (CURRENTLY AMENDED) The method as defined by claim 25 wherein step c) includes assigning a priority weight to each transmission burst based on quality of service subscribed by [[the]] a user of the respective data packet, on a priority assigned to the respective data packet and on the number of times the respective data packet has been delayed.

35. (PREVIOUSLY PRESENTED) Apparatus for selecting data packets for simultaneous transmission to multiple users using a limited transmission power comprising:
a)   a memory for receiving in a queue a plurality of data packets for transmission to one or more users,

b) power determining means for establishing power requirements for transmitting data to each user based on signal to noise ratio in each link to each user,

c) means for generating a transmission burst for each data
10 packet based on the respective power requirements, and

d) selection means for selecting one or more transmission bursts and grouping the selected transmission bursts for transmission in a composite burst with the cumulative power for the selected packets not exceeding the limited transmission power, the
15 selection means delaying packets as necessary to accommodate the limited transmission power.

36. (PREVIOUSLY PRESENTED) Apparatus as defined by claim 35 wherein the selection means gives priority in selection to delayed data packets.

37. (CURRENTLY AMENDED) Apparatus as defined by claim 35 wherein the selection means gives priority in selection to [[users]] a user based on quality of service.

38. (PREVIOUSLY PRESENTED) Apparatus as defined by claim 35 wherein the selection means gives priority in selection of the transmission bursts for a certain composite burst based on the priority of the packets.

39. (PREVIOUSLY PRESENTED) Apparatus as defined by claim 35 wherein the selection means gives priority in selection to delayed data packets, quality of service subscribed by [[each]] a user, and explicit priority of packets.